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(71) Applicant (for all designated States except US): KONIN-
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SIGOT, Thomas

[AT/AT]; Triester Strasse 64, A-1101 Vienna (AT).
BOUHUYS, Louis [AT/AT]; Triester Strasse 64, A-1101
Vienna (AT). PENA ANGARITA, Oscar [AT/AT]; Tri-
ester Strasse 64, A-1101 Vienna (AT).

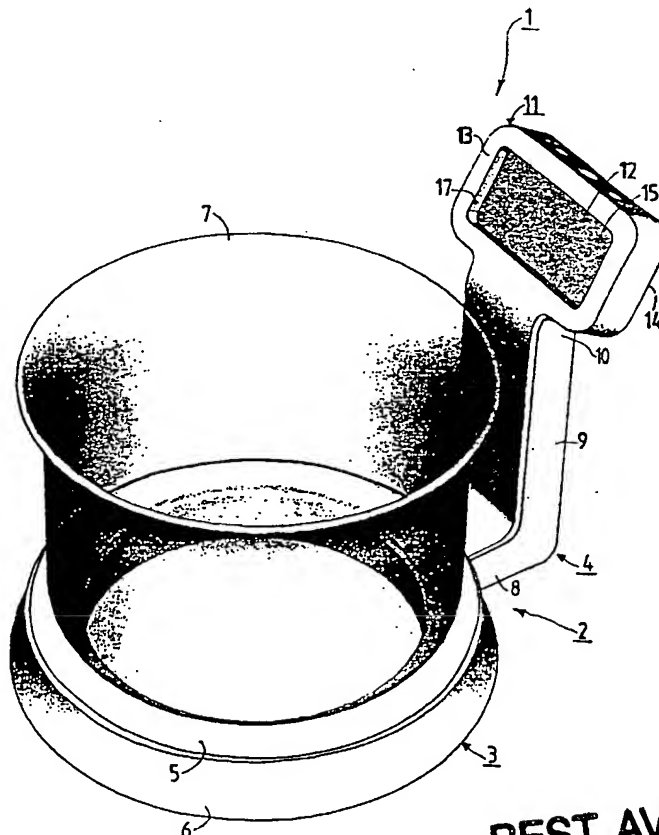
(74) Agent: WEBER, Helmut; Philips Intellectual Property &
Standards, Triester Strasse 64, A-1101 Vienna (AT).

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[Continued on next page]

(54) Title: KITCHEN APPLIANCE WITH NORMALLY BLACK TRANSMISSIVE LIQUID CRYSTAL DISPLAY DEVICE



(57) Abstract: In a kitchen appliance (1) with a housing (2) and with a liquid crystal display device (12), the liquid crystal display device (12) is accommodated in an accommodating section (11) of the housing (2), and the accommodating section (11) is bounded, on a front face (13) and on a rear face (14), by a transparent housing-wall section (15, 16), and the liquid crystal display device (12) is in the form of a negatively transmissive liquid crystal display device (12), which is disposed between the two transparent housing-wall sections (15, 16).

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INTERNATIONAL SEARCH REPORT

PCT/IB 03/02769

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G02F1/13 G01G23/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01G G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 650 014 A (MELCHER FRANZ-JOSEF ET AL) 17 March 1987 (1987-03-17) column 3, line 57 - line 68 figure 1	1-4
A	DE 24 61 239 A (BERKEL PATENT NV) 24 June 1976 (1976-06-24) page 1 page 3 figures 1,2	1-4
A	CH 662 438 A (METTLER INSTRUMENTE AG) 30 September 1987 (1987-09-30) page 2, right-hand column, line 26 - line 35 figures 1,2	1-4

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040. Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hauser, M

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 567 481 A (HANSELMANN ROLAND ET AL) 28 January 1986 (1986-01-28) abstract column 1, line 64 -column 2, line 6 column 3, line 62 -column 4, line 16 column 4, line 47 - line 64 figures 1,4</p>	1-4
A	<p>US 6 226 064 B1 (YOSHIKAWA HIROSHI ET AL) 1 May 2001 (2001-05-01) abstract figure 1</p>	1-4

INTERNATIONAL SEARCH REPORT

PCT/IB 03/02769

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 4650014	A	17-03-1987	DE	8437445 U1	30-05-1985
			CH	672189 A5	31-10-1989
			DE	3540749 A1	26-06-1986
			FR	2575286 A1	27-06-1986
			GB	2168821 A ,B	25-06-1986
			JP	1829909 C	15-03-1994
			JP	61155825 A	15-07-1986
			DE	3541882 A1	03-07-1986
DE 2461239	A	24-06-1976	DE	2461239 A1	24-06-1976
			GB	1500951 A	15-02-1978
			US	4017157 A	12-04-1977
CH 662438	A	30-09-1987	CH	662438 A5	30-09-1987
			DE	8503273 U1	02-05-1985
US 4567481	A	28-01-1986	CH	655573 B	30-04-1986
			CH	658515 A5	14-11-1986
			DE	3278481 D1	16-06-1988
			EP	0089406 A2	28-09-1983
US 6226064	B1	01-05-2001	JP	11109335 A	23-04-1999